



BK BIRLA GROUP OF COMPANIES

MANGALAM CEMENT LTD.



MANGALAM CEMENT LTD.

Regd. A/D

MCL/Env. Audit / 2023-2024/132

Dt :06.09.2023

The Chief Environmental Officer (Circle:04)
U. P. Pollution Control Board,
TC: 12V, Vibhuti Khand,
Gomti Nagar, Lucknow,
U.P. – 226010

Dear Sir,

Sub.: -Environmental Statement for the year 2022-2023

With reference to above subject, we are enclosing herewith an Environmental Statement Report of Aligarh Grinding Unit of M/s Mangalam Cement Ltd., Aligarh for the period from April-2022 to March-2023.

This is for your kind reference please. Kindly acknowledge the receipt at the earliest.

Thanking you,

Yours faithfully

For M/s Mangalam Cement Ltd., Aligarh


06/09/23

Authorized Signature

Cc to: - Regional Officer,
U.P. Pollution Control Board,
J-1, Gyan Sarovar Colony,
Ram Ghat Road, Aligarh, (U.P.)



Aligarh Grinding Unit : K-1, CDF Complex, Anoop Shahar Road, Chherat Gaon, Aligarh - 202122 (U.P.)
Central Marketing Office : 2nd Floor, Geejgarh Tower, Hawa Sadak, Jaipur-302006 (Raj.)
Regd. Office & Works : P.O - Aditya Nagar, Morak, Distt. Kota-326520 (Raj.)
Tel. : 07459-232812, Fax : 07459-232156, Email : marketing@mangalamcement.com

CIN : L26943RJ1976PLC001705
GSTIN : 09AABCM6602Q1Z2
WEBSITE : www.mangalamcement.com
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**FORM-V
ENVIRONMENTAL STATEMENT**

(See rule 14)

Environmental Statement for the financial year ending with 31st March 2023

PART-A

1.	Name & address of the owner/ occupier of the industry/ operation or process	Shri. K.C. Jain (Director) Aligarh Grinding Unit M/s Mangalam Cement Ltd. (Unit-I) K-1, CDF, Anoop Shahar Road, Aligarh (U.P.) Pin Code: 202122 Shri Mukesh Agarwal (Plant In-Charge) Aligarh Grinding Unit M/s Mangalam Cement Ltd. (Unit-I) K-1, CDF Anoop Shahar Road, Aligarh (U.P.) Pin Code: 202122
2.	Industry Category Primary – (STC Code) Secondary – (STC Code)	Red Category
3.	Production capacity	Cement: - OPC-1.25 MTPA PPC-1.99 MTPA
4.	Year of establishment	2016
5.	Date of last environmental statement submitted	14.09.2022

PART –B

Water and Raw Material Consumption:

I. Water consumption in m³/day

Process: - NA (As plant is based on Dry process technology)

Cooling: - 54.62 M³/day

Domestic: -11.65 M³/day

Name of Products	Process water consumption per unit of products	
	During Previous financial Year (2021-2022)	During the current financial Year (2022-2023)
1. Cement	0.079	0.050

II. Raw material consumption (Cement Plant)

Name of raw materials*	Name of product	Consumption of raw material per unit of output	
		During Previous financial year (2021-2022)	During Current financial year (2022-2023)
1. Fly Ash	Cement	0.279	0.301
2. Gypsum		0.059	0.066
3. Clinker		0.662	0.639

*Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

Raw Material Consumption (D.G. Set)

Name of raw materials*	Name of product	Consumption of raw material (Ltr)	
		During Previous financial year (2021-2022)	During Current financial year (2022-2023)
H. S. Diesel	Power	3410 (LTR)	3775 (LTR)

iii) Power Consumption (KWh/ T of Cement):-

During Previous Financial Year	During Current Financial Year
32.343	30.041

iv) Total Production (MT):-

Production	During Previous Financial Year	During Current Financial Year
Cement	288191.86	395597.0

Total Power Generation (DG Set) (KWh)

Production	During Previous Financial Year	During Current Financial Year
Power Generation	10046	11188

PART-C

Pollution discharged to environment/unit of output
(Parameter as specified in the consent issued)

Pollutants	Parameter	Quantity of Pollutants discharged(mass/day)	Concentration of Pollutants in discharged(mass /volume)	Percentage of variation from prescribed standards with reasons.
a) Water	As the plant is being operated on dry process technology, total process			

	water recycled, no liquid effluent is generated from the cement plant.			
b) Cement Mill	PM	0.0078 Ton / day	19.55 mg/Nm ³	No any deviation

PART-D

HAZARDOUS WASTES

(As specified under Hazardous Wastes (M, H& Transboundary Movement Rules, 2016).

Hazardous Wastes	Total Quantity			
	During previous financial year (2021-2022)		During Current financial year (2022-2023)	
1. From Process (Cement Manufacturing is based on "Dry Process" no Hazardous waste is generated form the process except used oil which is drained from Machinery/ Equipment)	We have Authorization for Hazardous waste Management & Handling for Clinker Grinding Unit, D.G. set		We have Authorization for Hazardous waste Management & Handling for Clinker Grinding Unit, D.G. set	
	Total Quantity Generated from April 2021 to March 2022 (Ltrs.)	NIL	Total Quantity Generated from April 2022 to March 2023 (Ltrs.)	4000
	Old stock (Ltrs.)	NIL	Old stock (Ltrs.)	NIL
	Total Used Oil (Ltrs.)	NIL	Total Used Oil (Ltrs.)	4000
	Sold-out to registered recycler (Ltrs.)	NIL	Sold-out to registered recycler (Ltrs.)	4000
	Balance Quantity (Ltrs.)	NIL	Balance Quantity (Ltrs.)	NIL
Empty Barrel- 33.1	NIL		Nil	
Processes Waste Sludge-23.1	NIL		NIL	
Cotton waste with oil-5.2	NIL		NIL	
Waste residue Containing oil -5.2	NIL		NIL	
2. From pollution control facilities	NA		NA	

PART-E

SOLID WASTE

Solid Wastes	Total Quantity (Kg)	
	During previous financial year (2021-2022)	During Current financial year (2022-2023)
1. From Process	NIL	NIL
2. From pollution control facilities	Dust Collected in the, bag house and bag filters are recycled to the system	
2. i) Quantity recycled or reutilised within the unit.	100 %	100 %
ii) Solid	NIL	NIL
iii) Disposed	NIL	NIL

PART – F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Battery Waste:-

As specified under Batteries (Management and Handling) Amendment Rules, 2010. We have purchased following new batteries of different categories for Cement plant Clinker Grinding Unit and DG Set -

Number of new batteries of categories purchased from the manufacturer / importer / dealer or any other agency.		During 1 st April 2022 to 31 st March 2023.	
for Cement Plant Clinker Grinding unit and DG Set			
Category	i) No. Of Batteries	ii) Approximate weight (In MT)	
i) Automotive			
a) Four Wheeler	Nil	Nil	
ii) Industrial			
a) UPS	02	80 KG	
Total	02	80 KG	

Number of used batteries of categories mentioned in Sl. No. 3 and Tonnage of scrap sent manufacturer / dealer / importer / registered recycler / or any other agency to whom the used batteries scrap was sent.		During 1 st April 2022 to 31 st March 2023.	
for Cement Plant Clinker Grinding unit and DG Set			
Category	iii) No. Of Batteries	iv) Approximate weight (In MT)	
i) Automotive	Nil		
a) Four-Wheeler			
ii) Industrial	Nil	Nil	
a) UPS			
Total	Nil	Nil	

Used battery scrap was sent to CPCB authorized recycler.

Hazardous Waste:

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from the process except used oil which is drained from Machineries / Equipments. The used oil & lead acid batteries are sold to CPCB authorized recyclers.

E- Waste:

E- Waste disposal for Cement plant Clinker Grinding Unit and DG Set, during financial year 2021 - 2022 and 2022-2023 under the E-Waste (Management) Rules 2016 & its amendments are as follows.

	Total Quantity Disposed	
	During Previous Financial Year (2021-2022)	During current Financial Year (2022-2023)

E-waste disposed	Nil	NIL
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E-waste was sent to CPCB authorized recycler.

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

M/s Mangalam Cement Limited is being operated on dry process technology, which is cost effective and environmentally clean technology. The advantage of dry process is also in fuel economy. The stack emissions from the plant are controlled by equipment like Bag Houses. Bag filters installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled in process and neutralizing the cost of operation of pollution control equipment and hence no cost impact on the production cost.

PART – H

Additional measures/investment proposal for environmental protection including abatement of pollution.

Green belt development and tree plantation is our on-going process. In the year 2022-2023 we have planted 910 No's of native species and up to March 2023, in Clinker Grinding Unit and DG Set.

PART – I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.

1. We have full-fledged Environment Department with three separate cells, for monitoring, maintenance of pollution control equipment and Green Belt development.
2. Monitoring of stack emission and ambient air and water quality is being done regularly.
3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.
4. Civil Department is taking care of Housekeeping, water supply.
5. Horticulture Department is taking care of tree plantation and green belt development. Every year we are doing tree plantation.

We are enclosing herewith following documents: -

Annexure – 1: - Stack Emission Monitoring Test Reports

Annexure – 2: - Ambient Air Quality (PM10, PM2.5, NOx and SO2)

Annexure – 3: - Ambient Noise Monitoring.

Aligarh Grinding Unit
(M/s Mangalam Cement Ltd.)
Cement Mill Stack Monitoring Report
2022-2023

S. No.	Month	Measured Value (in mg/NM3)
Permissible Limit		30
1	Apr-22	19.3
2	May-22	20.1
3	Jun-22	20.0
4	Jul-22	20.1
5	Aug-22	20.7
6	Sep-22	19.7
7	Oct-22	19.6
8	Nov-22	19.5
9	Dec-22	18.1
10	Jan-23	18.6
11	Feb-23	19.1
12	Mar-23	20.1
Average		19.6
Min		18.1
Max		20.7

MANGALAM CEMENT LIMITED, (Aligarh Grinding UNIT),
Dist: Aligarh (U.P.)

AMBIENT AIR QUALITY (All values in $\mu\text{g}/\text{m}^3$)

Year, 2022-23

Location Month	Near Canteen					Near CDF Building-I					Near Packing Plant					Near CDF Building II				
	PM 10	PM 2.5	SO ₂	NO _x	CO	PM 10	PM 2.5	SO ₂	NO _x	CO	PM 10	PM 2.5	SO ₂	NO _x	CO	PM 10	PM 2.5	SO ₂	NO _x	CO
Limits	100	60	80	80	4000	100	60	80	80	4000	100	60	80	80	4000	100	60	80	80	4000
Apr-22	60.5	31.5	7.1	14.3	518.2	59.0	29.9	6.8	13.9	471.0	72.3	35.6	7.9	14.2	472.4	59.6	30.2	8.5	12.8	429.3
May-22	65.0	32.6	7.9	14.5	512.7	58.3	30.2	7.1	12.5	475.2	63.0	32.0	6.5	15.3	497.4	61.5	32.6	7.5	13.2	446.0
Jun-22	54.6	28.6	6.9	15.3	467.4	61.1	32.6	7.5	13.9	433.0	69.9	34.6	7.8	14.6	434.5	55.4	28.6	7.1	13.9	408.0
Jul-22	52.8	26.3	7.2	14.3	519.6	50.6	22.1	6.8	14.2	461.3	56.9	28.2	6.6	14.2	455.7	53.9	26.5	6.9	13.0	430.7
Aug-22	59.1	28.9	6.7	14.4	490.5	58.3	27.7	6.9	13.1	484.9	65.6	32.4	7.1	14.2	501.6	59.7	29.9	6.9	13.4	461.3
Sep-22	58.3	27.1	6.9	13.7	490.5	55.0	24.9	6.8	13.0	468.2	62.5	29.7	7.1	13.9	472.4	56.4	26.4	6.9	13.2	455.7
Oct-22	58.9	28.0	6.5	12.4	478.3	54.9	26.4	6.9	13.2	464.2	61.3	30.1	6.7	12.8	462.7	51.6	25.5	7.1	14.5	443.9
Nov-22	62.3	31.2	7.1	14.5	507.1	54.0	27.0	7.5	13.6	55.7	51.3	24.5	6.4	12.8	480.7	50.8	23.5	6.1	13.8	451.6
Dec-22	54.6	26.1	7.6	13.6	459.9	52.4	24.6	7.2	13.2	501.6	62.4	32.1	8.3	14.5	490.5	57.0	29.7	7.3	14.2	451.6
Jan-23	59.8	29.4	6.8	14.2	486.3	57.0	28.6	7.1	13.2	505.7	66.4	33.5	7.4	13.9	490.5	61.9	31.9	6.7	12.8	451.6
Feb-23	61.2	32.5	7.5	13.2	487.7	54.9	27.7	6.4	12.5	504.9	61.9	30.4	7.8	14.1	492.4	56.0	27.7	7.2	13.4	456.4
Mar-23	55.9	26.9	7.7	13.8	519.6	61.3	32.7	7.8	14.6	461.3	64.9	33.8	8.1	15.2	455.7	59.9	30.6	7.8	13.1	430.7
Average	58.6	29.1	7.2	14.0	494.8	56.4	27.9	7.1	13.4	475.6	63.2	31.4	7.3	14.1	475.5	57.0	28.6	7.2	13.4	443.1
Minimum	52.8	26.1	6.5	12.4	459.9	50.6	22.1	6.4	12.5	433.0	51.3	24.5	6.4	12.8	434.5	50.8	23.5	6.1	12.8	408.0
Maximum	65.0	32.6	7.9	15.3	519.6	61.3	32.7	7.8	14.6	505.7	72.3	35.6	8.3	15.3	501.6	61.9	32.6	8.5	14.5	461.3

**MANGALAM CEMENT LIMITED, (Aligarh Grinding UNIT),
Dist: Aligarh (U.P.)**

AMBIENT NOISE MONITORING REPORT

Year, 2022-23

Date	Measured Noise Level (in dBA)							
	Near Canteen		Near CDF Building-I		Near Packing Plant		Near CDF Building-II	
	Day	Night	Day	Night	Day	Night	Day	Night
Limits	75.0	70.0	75.0	70.0	75.0	70.0	75.0	70.0
Apr-22	65.1	60.7	64.3	60.0	67.7	63.5	65.4	61.5
May-22	66.0	61.7	64.8	60.4	67.9	64.1	65.8	62.5
Jun-22	64.2	60.1	63.7	59.3	67.4	63.4	64.2	60.0
Jul-22	65.9	61.9	64.6	60.5	67.4	64.1	66.4	62.7
Aug-22	65.0	61.4	63.9	60.2	68.5	65.1	65.9	62.8
Sep-22	64.0	60.4	64.4	61.0	66.9	63.5	64.5	61.4
Oct-22	63.2	59.6	63.1	59.3	66.6	62.2	63.2	59.5
Nov-22	64.4	60.8	64.8	60.4	67.9	64.6	64.4	60.6
Dec-22	65.0	61.8	65.3	62.3	66.8	63.7	64.1	60.9
Jan-23	66.5	63.5	66.2	63.4	67.0	64.4	66.6	64.2
Feb-23	65.0	62.2	64.3	61.1	66.1	63.7	64.9	62.3
Mar-23	64.4	61.0	65.5	61.8	66.0	63.0	65.5	61.8
Average	64.9	61.3	64.6	60.8	67.2	63.8	65.1	61.7
Minimum	63.2	59.6	63.1	59.3	66.0	62.2	63.2	59.5
Maximum	66.5	63.5	66.2	63.4	68.5	65.1	66.6	64.2